

0975050 12200

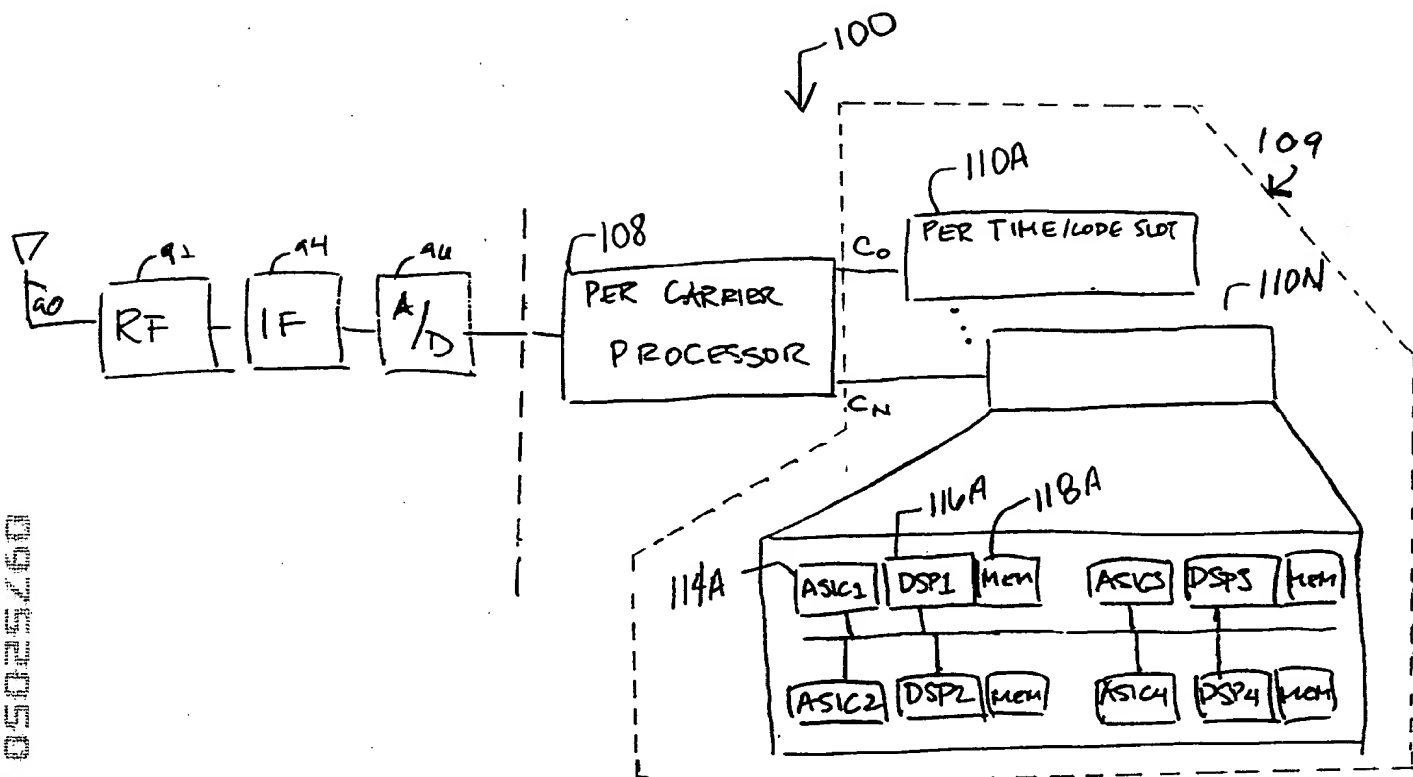


FIGURE 1
(Prior Art)

200
↓

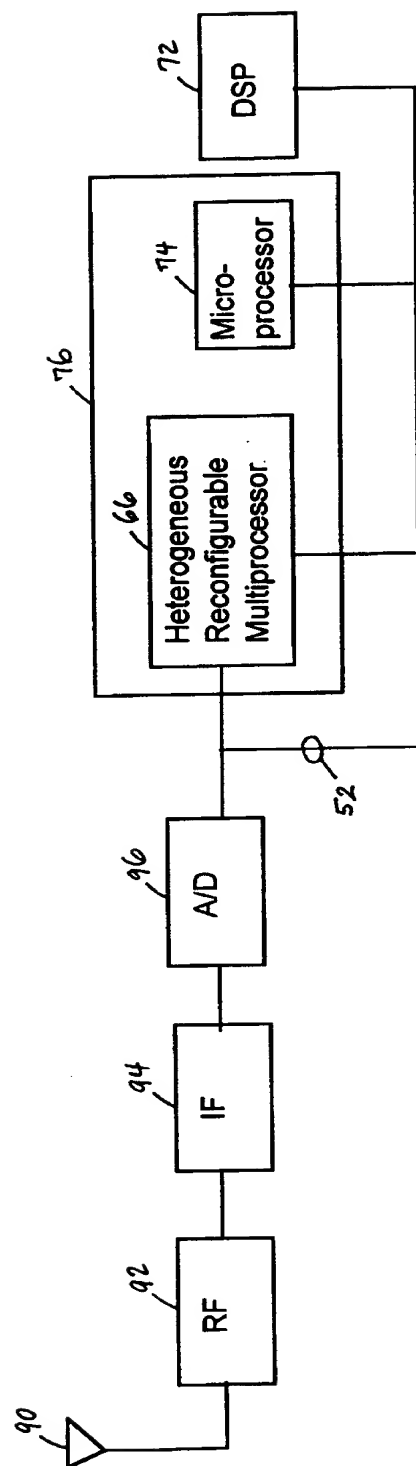


FIG. 2

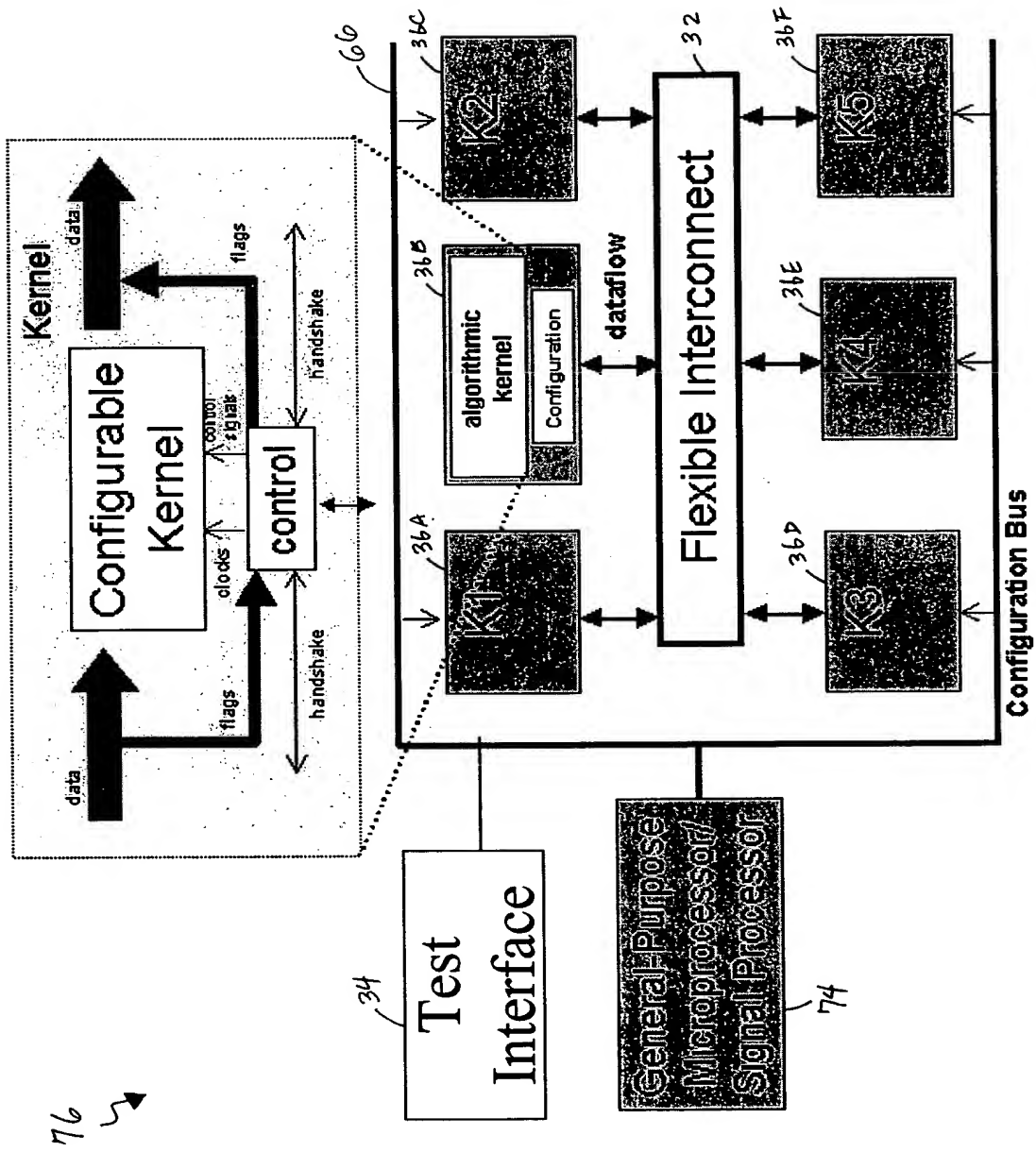


FIG. 3

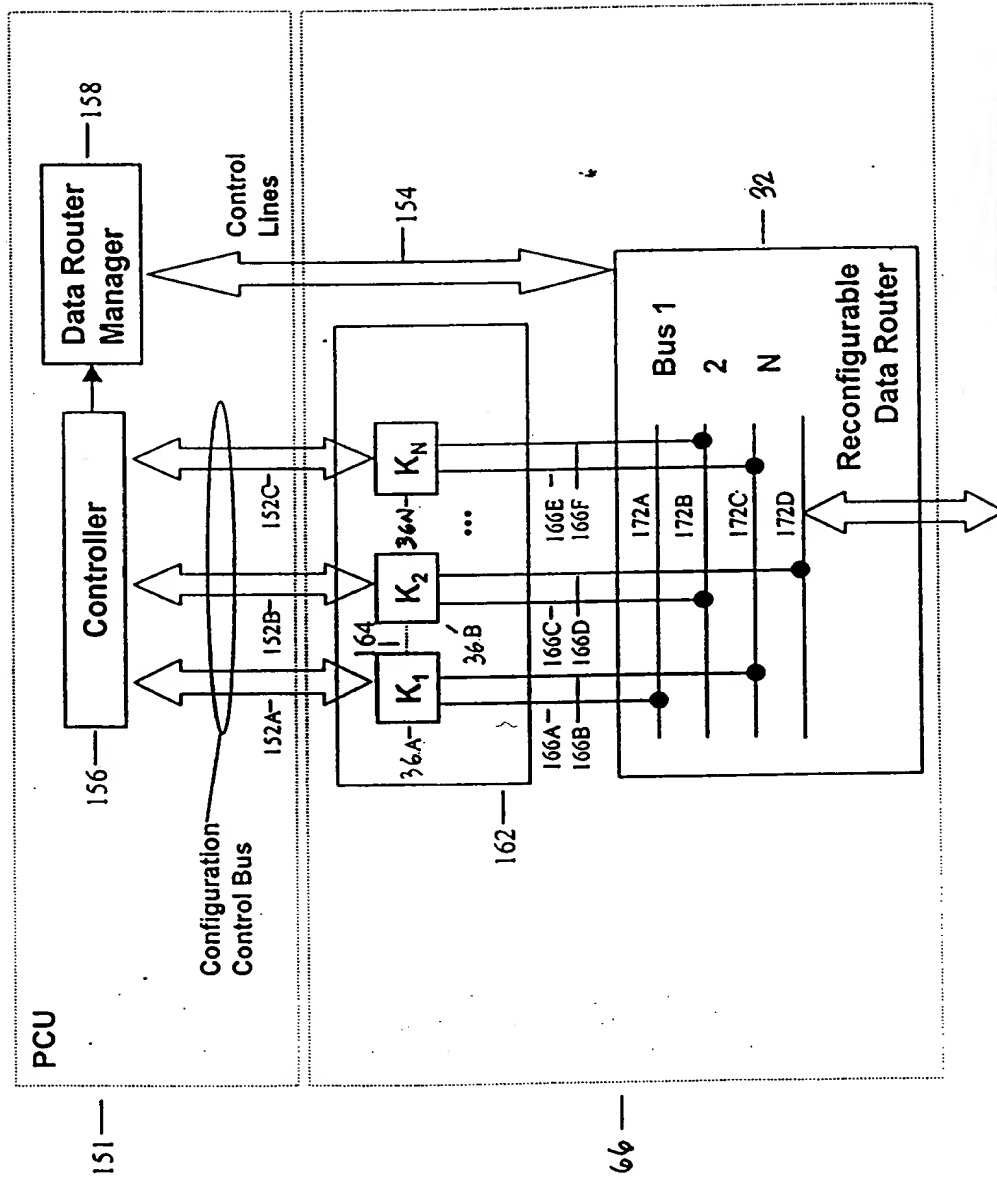


FIG. 4

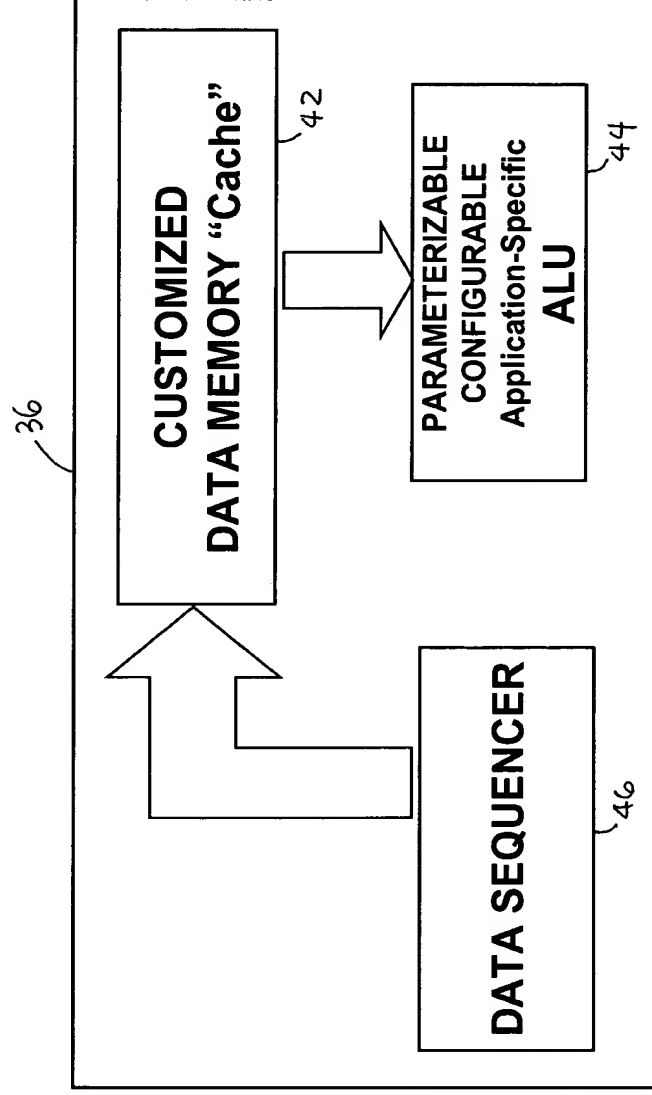


FIG. 5

006227 05025460
190

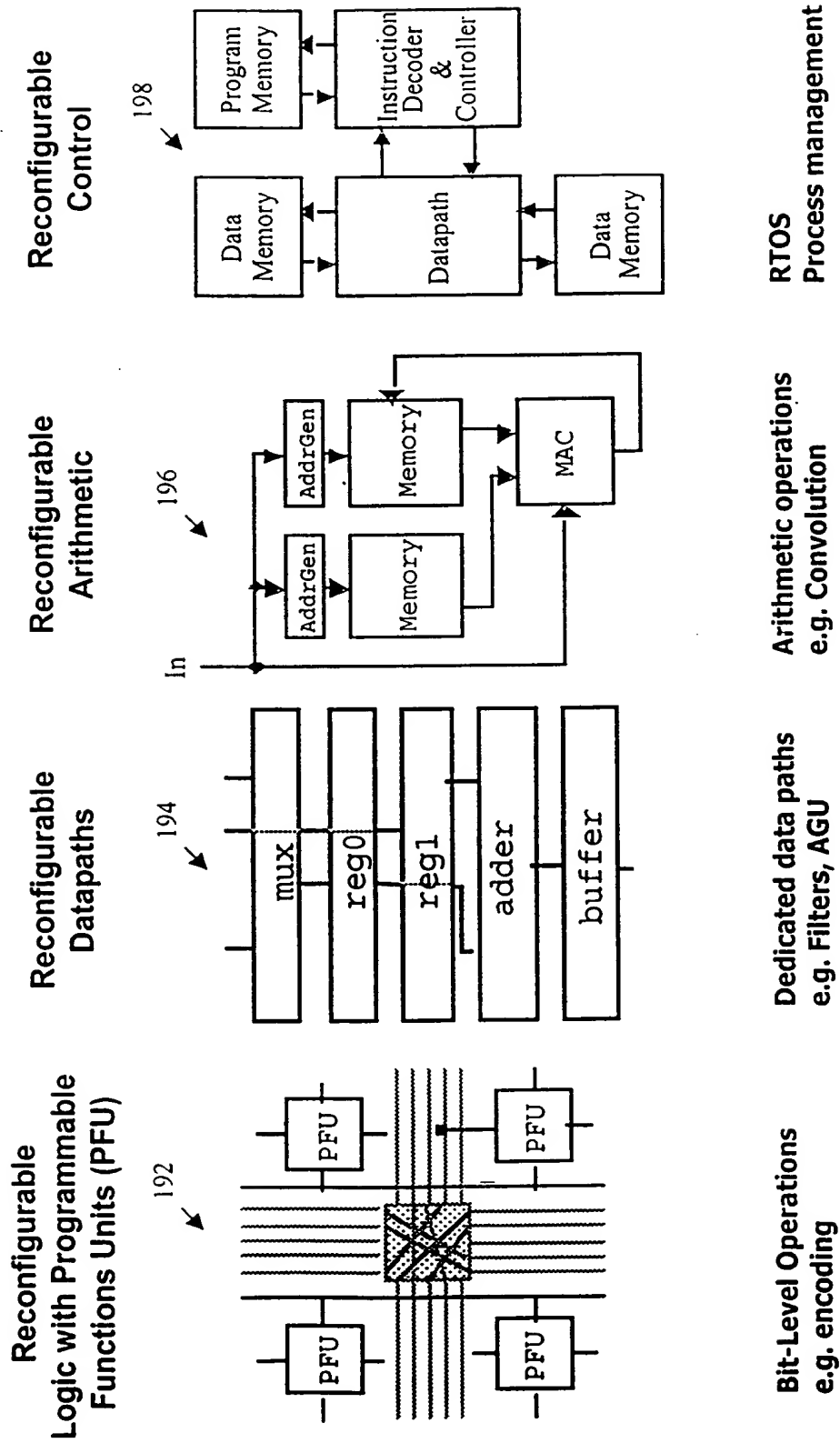


FIG. 6



	TDMA				CDMA				
	IS136	GSM	GPRS	EDGE	IS-95B	IS-2000	WCDMA-FDD	GPS	Globalstar
Parameter Estimation Functions									
LMS Channel Estimator		x	x	x					
Windowed Average Energy Estimator	x	x	x	x	x	x	x	x	x
ML Symbol Timing Estimator	x	x	x	x	x	x	x	x	x
ML Carrier Phase Estimator	x	x	x	x	x	x	x	x	x
PN Correlator					x	x	x	x	x
Matched Filter									
Interference Energy Estimator						x	x	x	x

FIG. 8

Multi-standard Engine

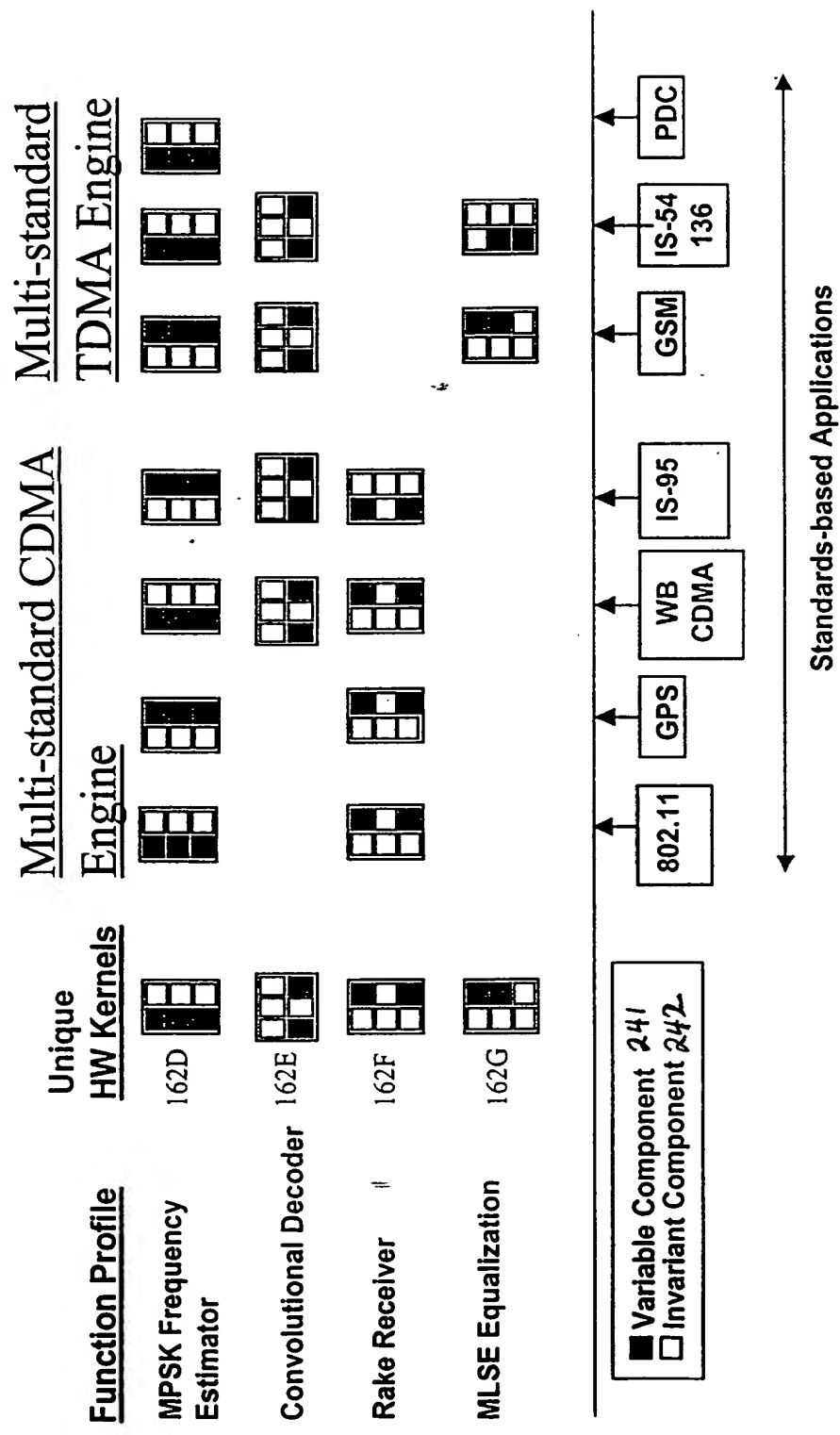


FIG. 9

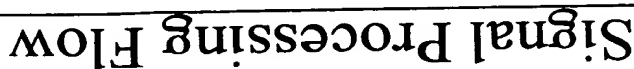


FIG. 10

Application / Product Management

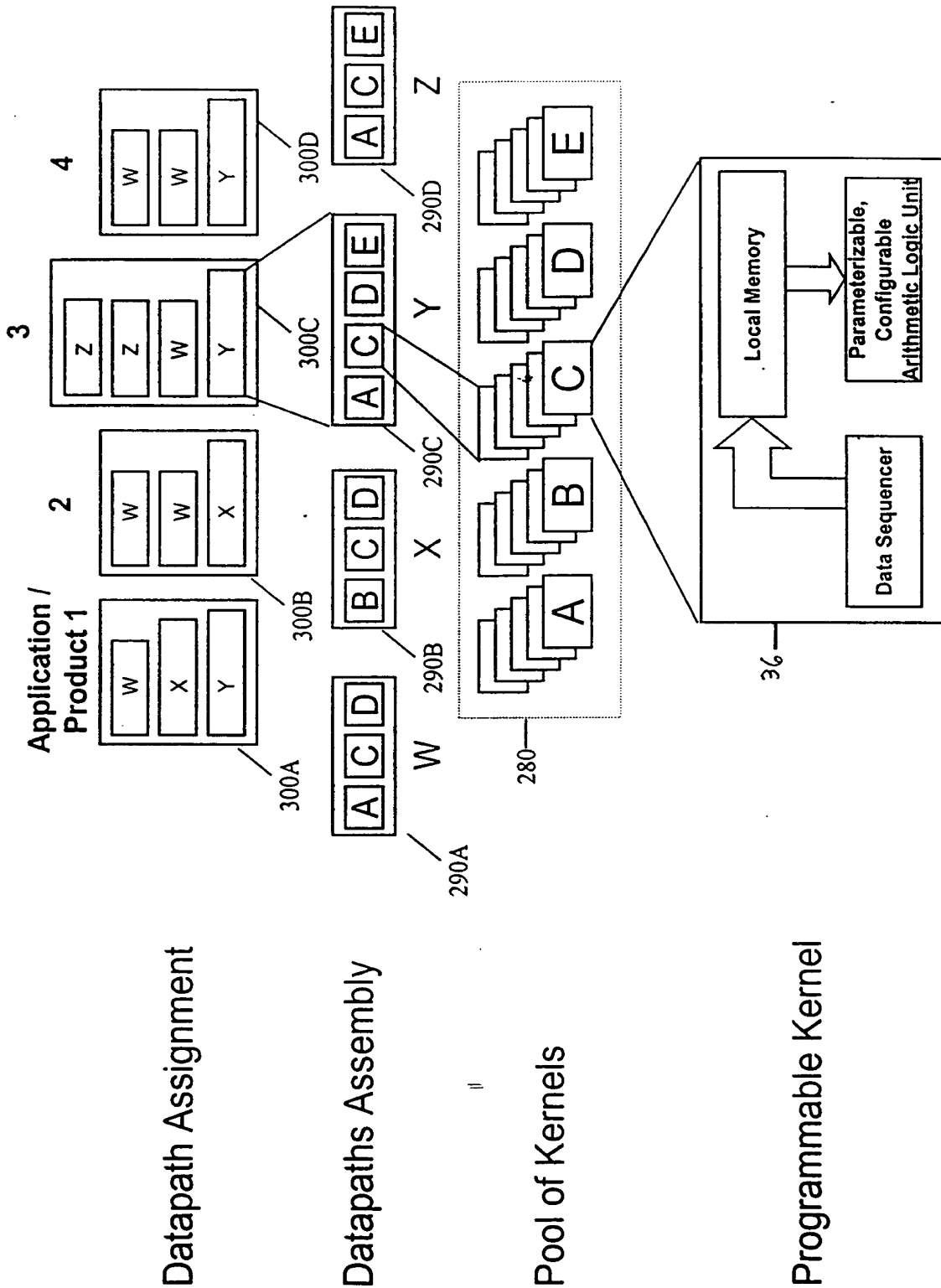


FIG. 11

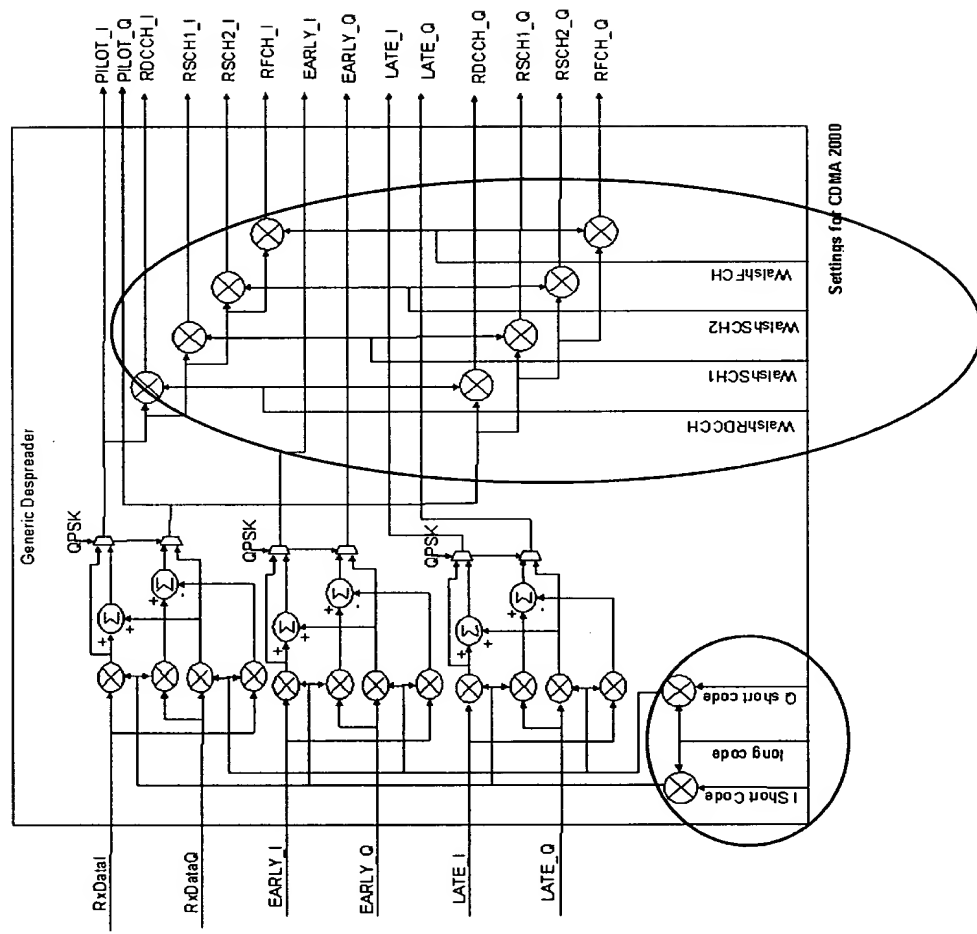


FIG. 13

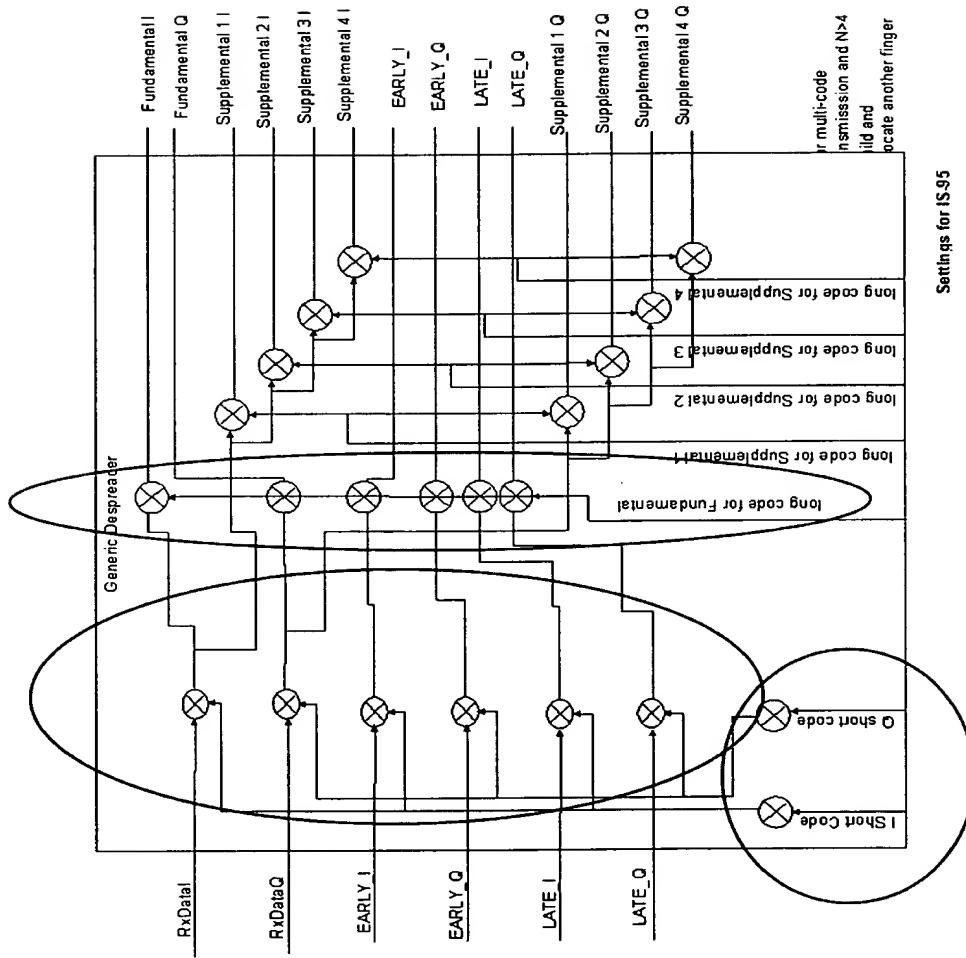


FIG. 14

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CDMA Computation Unit Library	
<i>Front End Processing</i> Sample Interpolation	<i>Parameter Estimation</i> Energy Estimator Timing Parameter Estimator Channel Estimator
<i>Chip Rate Processing</i> Sample Epoch Selection Matched Filter Generic Despreader Generic Dechannelizer Code Generation Unit Integrate and Dump Generic Searcher Control	<i>Channel Element Processing</i> Alignment/Deskewing Combiner Soft Decision Computer Interpath Interference Equalizer Receive Antenna Diversity Combiner
<i>Symbol Sequence Processing</i> Transport Format Decoder Dynamic Spreading Factor Computer Fast Hadamard Transform Rotator/Squarer	<i>Interleaving</i> Deinterleaver Controller <i>Channel Decoding</i> Turbo Decoder Convolutional Decoder

FIG. 15

TDMA Computation Unit Library

<i>TDMA Modem Transmitter</i> Pulpse-shaping Multiplexing	<i>TDMA Modem Receiver</i> Front-end Filtering Adaptive Demodulation
Link Adaptation (AMR) Antenna Transmit Diversity	Synchronization Adaptive Parameter Estimation Equalization Diversity Combining Link Adaptation
<i>Channel Decoder</i> Reed Solomon Codes Decoding Fire Codes Decoding Decryption Deinterleaving	
	<i>Channel Encoder</i> Encoding Encryption Interleaving

FIG. 16

09752050.12900
006227 05025260

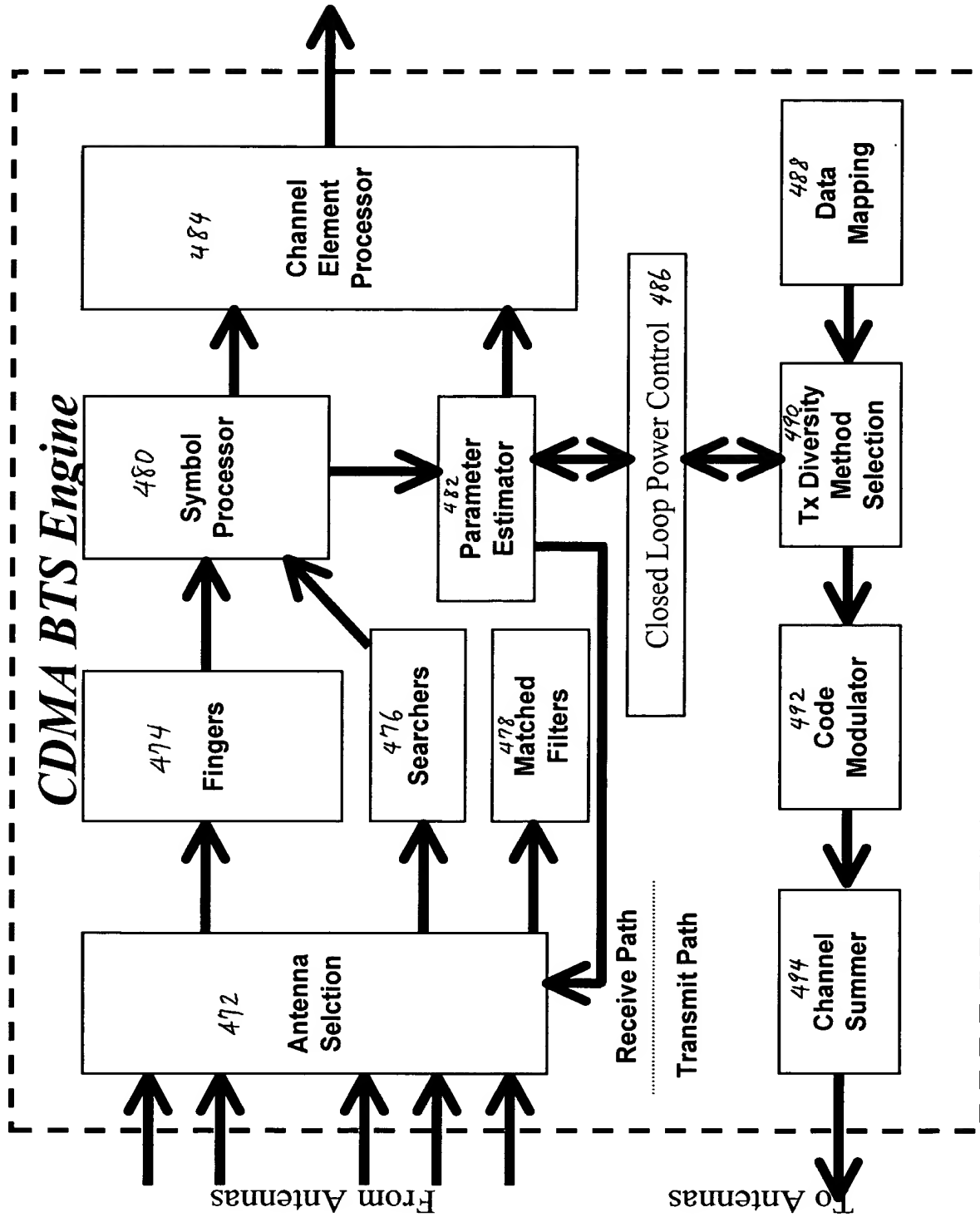


FIG. 17

500

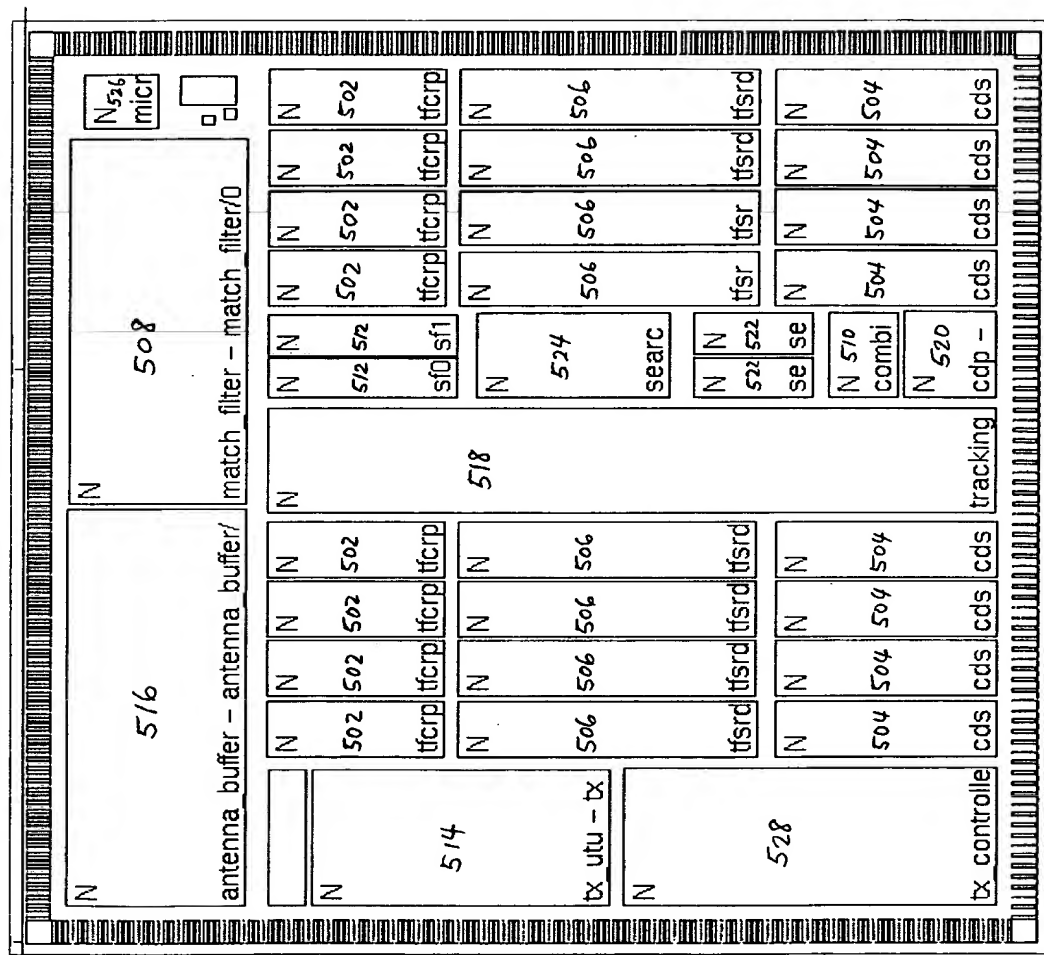


FIG. 18